RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/539, 443
Source:	IFUP.
Date Processed by STIC:	08/07/2006

ENTERED



IFWP

RAW SEQUENCE LISTING DATE: 08/07/2006
PATENT APPLICATION: US/10/539,443 TIME: 09:43:36

Input Set : A:\SequenceListing.ST25.txt
Output Set: N:\CRF4\08072006\J539443.raw

```
3 <110> APPLICANT: Aarhus University
      5 <120> TITLE OF INVENTION: Modulation of activity of neurotrophins
      7 <130> FILE REFERENCE: P700PC00
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/539,443
C--> 9 <141> CURRENT FILING DATE: 2005-06-20
     9 <160> NUMBER OF SEQ ID NOS: 13
     11 <170> SOFTWARE: PatentIn version 3.1
     13 <210> SEQ ID NO: 1
     14 <211> LENGTH: 831
     15 <212> TYPE: PRT
     16 <213> ORGANISM: Homo sapiens
     18 <400> SEQUENCE: 1
     20 Met Glu Arg Pro Trp Gly Ala Ala Asp Gly Leu Ser Arg Trp Pro His
     24 Gly Leu Gly Leu Leu Leu Leu Gln Leu Leu Pro Pro Ser Thr Leu
                    20
     28 Ser Gln Asp Arg Leu Asp Ala Pro Pro Pro Pro Ala Ala Pro Leu Pro
     32 Arg Trp Ser Gly Pro Ile Gly Val Ser Trp Gly Leu Arg Ala Ala Ala
                                55
     36 Ala Gly Gly Ala Phe Pro Arg Gly Gly Arg Trp Arg Arg Ser Ala Pro
                            70
                                                75
     40 Gly Glu Asp Glu Glu Cys Gly Arg Val Arg Asp Phe Val Ala Lys Leu
     44 Ala Asn Asn Thr His Gln His Val Phe Asp Asp Leu Arg Gly Ser Val
     45
                                        105
                                                            110
     48 Ser Leu Ser Trp Val Gly Asp Ser Thr Gly Val Ile Leu Val Leu Thr
     49
                115
                                    120
     52 Thr Phe His Val Pro Leu Val Ile Met Thr Phe Gly Gln Ser Lys Leu
                                135
     56 Tyr Arg Ser Glu Asp Tyr Gly Lys Asn Phe Lys Asp Ile Thr Asp Leu
                            150
                                                155
     60 Ile Asn Asn Thr Phe Ile Arg Thr Glu Phe Gly Met Ala Ile Gly Pro
                        165
                                            170
     64 Glu Asn Ser Gly Lys Val Val Leu Thr Ala Glu Val Ser Gly Gly Ser
                    180
                                        185
     68 Arg Gly Gly Arg Ile Phe Arg Ser Ser Asp Phe Ala Lys Asn Phe Val
                                    200
     72 Gln Thr Asp Leu Pro Phe His Pro Leu Thr Gln Met Met Tyr Ser Pro
            210
                                215
     76 Gln Asn Ser Asp Tyr Leu Leu Ala Leu Ser Thr Glu Asn Gly Leu Trp
                                                235
     80 Val Ser Lys Asn Phe Gly Gly Lys Trp Glu Glu Ile His Lys Ala Val
```

Input Set : A:\SequenceListing.ST25.txt
Output Set: N:\CRF4\08072006\J539443.raw

81					245					250					255	
84 (Cys	Leu	Ala	Lys	Trp	Gly	Ser	Asp	Asn	Thr	Ile	Phe	Phe	Thr	Thr	Tyr
85	•			260	-	-		-	265					270		-
88 2	Ala .	Asn	Gly	Ser	Cys	Lys	Ala	Asp	Leu	Gly	Ala	Leu	Glu	Leu	Trp .	Arg
89			275					280					285			
92	Thr	Ser	Asp	Leu	Gly	Lys	Ser	Phe	Lys	Thr	Ile	Gly	Val	Lys	Ile	Tyr
93		290					295					300				
96 \$	Ser	Phe	Gly	Leu	Gly	Gly	Arg	Phe	Leu	Phe	Ala	Ser	Val	Met .	Ala .	Asp
97	305					310					315					320
100	Lys	Asp	Thr	Thr	Arg	Arg	, Ile	e His	s Val	l Ser	Thi	Asp	Glr	ı Gly	Asp	Thr
101					325	;				330)				335	
104	Trp	Ser	Met	Ala	Gln	Lei	ı Pro	Sei	val	l Gly	/ Glr	ı Glu	ı Glr	ı Phe	Tyr	Ser
105				340)				345	5				350		
108	Ile	Let	ı Ala	Ala	. Asn	Asp	Asp	o Met	: Val	l Phe	e Met	His	val	Asp	Glu	Pro
109			355					360					365			
112	Gly	Asp	Thr	Gly	r Phe	Gly	/ Thi	r Ile	e Phe	e Thr	Sei	: Asp	Asp	Arg	Gly	Ile
113		370)				375	5				380)			
116	Val	Tyr	Ser	Lys	Ser	Leu	ı Ası	o Arg	g His	: Lei	і Туі	Thr	Thi	Thr	Gly	Gly
117	385					390)				395	5				400
120	Glu	Thr	Asp	Phe	Thr	Asr	ı Val	l Thi	r Sei	Leu	ı Arç	g Gly	/ Val	l Tyr	Ile	Thr
121					405					410					415	
124	Ser	Val	. Leu	Ser	Glu	ı Asp	Ası	n Sei	c Ile	e Glr	1 Thi	: Met	: Ile	? Thr	Phe	Asp
125				420					425					430		
	Gln	Gly	_	_	Trp	Thi	His		_	J Lys	Pro	o Glu		ı Ser	Glu	Cys
129		_	435					44(445			
	Asp			Ala	Lys	Asr	_		ı Glı	ı Cys	s Sei			: Ile	His	Ala
133		450			_		455		_		_	460		_	_	_
		Туг	Ser	ITe	Ser			s Le	ı Asr	ı Val			: Ala	a Pro	Leu	
	465	_	_		7	470					475		~		~1	480
	GIu	Pro) Asn	Ala		_	7 116	e va.	r ite			GIZ	, sei	: Val	_	
141	77 -	- 1 -			485		D	- 7		490			. 7	. 7	495	
	Ala	116	s ser			. val	L PIC	J ASI	ر va. 505	_	. 116	e ser	. ASI	Asp 510	GIY	GIY
145	Тч	Cor	• Ф~~	500		Mot	· T 🔾	. (3)			uic	· (Tr.)	^ Тъгъ	Thr	Tlo	Leu
149	ıyı	ser	515		. цуз	Met	. пе	520	_	, 110) HIS	o iyi	. 1y1		116	цец
	Δen	Ser			, Tle	т14	. Val			c1,	Hic	י פא		Arg	Pro	Tle
153	1100	530		O L y	110		535			. 011		540		9	110	
	Δgn			Tive	: Phe	Ser			o Gli	ı Glx	, Glr			Gln	Thr	Tyr
	545	• • • •			, 1110	550		- 1101	, 010	. 017	555		,	0111		560
		Phe	Thr	Arc	ı Asr			⊃ Tvາ	r Phe	- Thr) Ala	a Ser	Glu	
161				**** 5	565		,			570					575	
	Glv	Δla	Aro	Ser			1 T] 6	- Sei	r Tle			z Phe	Thi	Glu		Phe
165	1		5	580					585		,			590		
	Leu	Thr	Ser			Va]	. Se	r Tvi			e Ast) Phe	e Lvs	s Asp	Ile	Leu
169			595		L			600					605			
	Glu	Arc			: Glu	Gli	ı Lys			Thr	· Ile	e Trr	Lei	ı Ala	His	Ser
173		610		4			61					620				
	Thr	Asr	Pro	Glu	. Asp	Tyr	Glı	ı Ası	Gly	/ Cys	: Ile			y Tyr	Lys	Glu
	625	_			-	630		-	-	-	635		-	_	-	640

Input Set : A:\SequenceListing.ST25.txt
Output Set: N:\CRF4\08072006\J539443.raw

180 Gln Phe Leu Arg Leu Arg Lys Ser Ser Met Cys Gln Asn Gly Arg Asp 645 650 184 Tyr Val Val Thr Lys Gln Pro Ser Ile Cys Leu Cys Ser Leu Glu Asp 665 660 188 Phe Leu Cys Asp Phe Gly Tyr Tyr Arg Pro Glu Asn Asp Ser Lys Cys 680 675 192 Val Glu Gln Pro Glu Leu Lys Gly His Asp Leu Glu Phe Cys Leu Tyr 695 196 Gly Arg Glu Glu His Leu Thr Thr Asn Gly Tyr Arg Lys Ile Pro Gly 710 715 200 Asp Lys Cys Gln Gly Gly Val Asn Pro Val Arg Glu Val Lys Asp Leu 725 730 204 Lys Lys Lys Cys Thr Ser Asn Phe Leu Ser Pro Glu Lys Gln Asn Ser 745 740 208 Lys Ser Asn Ser Val Pro Ile Ile Leu Ala Ile Val Gly Leu Met Leu 755 760 212 Val Thr Val Val Ala Gly Val Leu Ile Val Lys Lys Tyr Val Cys Gly 775 216 Gly Arg Phe Leu Val His Arg Tyr Ser Val Leu Gln Gln His Ala Glu 795 220 Ala Asn Gly Val Asp Gly Val Asp Ala Leu Asp Thr Ala Ser His Thr 805 810 224 Asn Lys Ser Gly Tyr His Asp Asp Ser Asp Glu Asp Leu Leu Glu 225 820 228 <210> SEQ ID NO: 2 229 <211> LENGTH: 2214 230 <212> TYPE: PRT 231 <213> ORGANISM: Homo sapiens 233 <400> SEQUENCE: 2 235 Met Ala Thr Arg Ser Ser Arg Arg Glu Ser Arg Leu Pro Phe Leu Phe 239 Thr Leu Val Ala Leu Leu Pro Pro Gly Ala Leu Cys Glu Val Trp Thr 20 25 243 Gln Arg Leu His Gly Gly Ser Ala Pro Leu Pro Gln Asp Arg Gly Phe 247 Leu Val Val Gln Gly Asp Pro Arg Glu Leu Arg Leu Trp Ala Arg Gly 251 Asp Ala Arg Gly Ala Ser Arg Ala Asp Glu Lys Pro Leu Arg Arg Lys 255 Arg Ser Ala Ala Leu Gln Pro Glu Pro Ile Lys Val Tyr Gly Gln Val 90 85 259 Ser Leu Asn Asp Ser His Asn Gln Met Val Val His Trp Ala Gly Glu 263 Lys Ser Asn Val Ile Val Ala Leu Ala Arg Asp Ser Leu Ala Leu Ala 115 120 267 Arg Pro Lys Ser Ser Asp Val Tyr Val Ser Tyr Asp Tyr Gly Lys Ser 135 140 271 Phe Lys Lys Ile Ser Asp Lys Leu Asn Phe Gly Leu Gly Asn Arg Ser 150 155 272 145

Input Set : A:\SequenceListing.ST25.txt
Output Set: N:\CRF4\08072006\J539443.raw

275 Glu Ala Val Ile Ala Gln Phe Tyr His Ser Pro Ala Asp Asn Lys Arg 165 279 Tyr Ile Phe Ala Asp Ala Tyr Ala Gln Tyr Leu Trp Ile Thr Phe Asp 180 185 283 Phe Cys Asn Thr Leu Gln Gly Phe Ser Ile Pro Phe Arg Ala Ala Asp 195 200 287 Leu Leu Leu His Ser Lys Ala Ser Asn Leu Leu Cly Phe Asp Arg 215 291 Ser His Pro Asn Lys Gln Leu Trp Lys Ser Asp Asp Phe Gly Gln Thr 230 235 295 Trp Ile Met Ile Gln Glu His Val Lys Ser Phe Ser Trp Gly Ile Asp 245 250 299 Pro Tyr Asp Lys Pro Asn Thr Ile Tyr Ile Glu Arg His Glu Pro Ser 265 260 303 Gly Tyr Ser Thr Val Phe Arg Ser Thr Asp Phe Phe Gln Ser Arg Glu 280 275 307 Asn Gln Glu Val Ile Leu Glu Glu Val Arg Asp Phe Gln Leu Arg Asp 290 295 311 Lys Tyr Met Phe Ala Thr Lys Val Val His Leu Leu Gly Ser Glu Gln 315 Gln Ser Ser Val Gln Leu Trp Val Ser Phe Gly Arg Lys Pro Met Arg 325 330 319 Ala Ala Gln Phe Val Thr Arg His Pro Ile Asn Glu Tyr Tyr Ile Ala 345 323 Asp Ala Ser Glu Asp Gln Val Phe Val Cys Val Ser His Ser Asn Asn 355 360 327 Arg Thr Asn Leu Tyr Ile Ser Glu Ala Glu Gly Leu Lys Phe Ser Leu 375 331 Ser Leu Glu Asn Val Leu Tyr Tyr Ser Pro Gly Gly Ala Gly Ser Asp 390 395 335 Thr Leu Val Arg Tyr Phe Ala Asn Glu Pro Phe Ala Asp Phe His Arg 405 410 339 Val Glu Gly Leu Gln Gly Val Tyr Ile Ala Thr Leu Ile Asn Gly Ser 420 425 343 Met Asn Glu Glu Asn Met Arq Ser Val Ile Thr Phe Asp Lys Gly Gly 440 347 Thr Trp Glu Phe Leu Gln Ala Pro Ala Phe Thr Gly Tyr Gly Glu Lys 455 460 351 Ile Asn Cys Glu Leu Ser Gln Gly Cys Ser Leu His Leu Ala Gln Arg 470 475 355 Leu Ser Gln Leu Leu Asn Leu Gln Leu Arg Arg Met Pro Ile Leu Ser 485 490 359 Lys Glu Ser Ala Pro Gly Leu Ile Ile Ala Thr Gly Ser Val Gly Lys 500 505 363 Asn Leu Ala Ser Lys Thr Asn Val Tyr Ile Ser Ser Ser Ala Gly Ala 515 520 367 Arg Trp Arg Glu Ala Leu Pro Gly Pro His Tyr Tyr Thr Trp Gly Asp 535 371 His Gly Gly Ile Ile Thr Ala Ile Ala Gln Gly Met Glu Thr Asn Glu

Input Set : A:\SequenceListing.ST25.txt
Output Set: N:\CRF4\08072006\J539443.raw

250	- 4 -															560
	545	T		0	mla sa	550	~1	a1	~ 1	mb	555	T	mh so	Dho	т1.	560
	ьeu	ьys	Tyr	ser		Asn	GIU	GIY	Glu		Trp	гуѕ	inr	Pne		Pne
376	a	~ 1.	T	D	565	D1	**- 7	m	01.	570	T	ml	a 1	D	575	a 1
	ser	GIU	гуѕ		Val	Pne	vai	Tyr	Gly	ьeu	ьeu	THE	GIU		GIY	GIU
380	_	_	m1 .	580	51. .	m1	-1 .	D1: -	585	a	3	T	a 1	590	**- 1	TT -
	ьys	ser		vaı	Pne	Thr	iie		Gly	ser	Asn	гуз		Asn	vai	HIS
384			595	- 1.	.	a1	**- 7	600	7 T -	m1	7	77-	605	a 1	77-7	D
	ser	_	Leu	тте	ьeu	Gin		Asn	Ala	Thr	Asp		ьеи	GIY	vai	Pro
388	~	610	~1	_			615	T			D	620	7	~1	3	a 1
	_	Thr	GIU	Asn	Asp	_	гÀг	ьeu	Trp	ser		Ser	Asp	GIU	Arg	
	625	~1	~	.	.	630	***	T	m1	**- 3	635	T	7	7	mb	640
	ASII	GIU	Cys	ьeu		GIY	HIS	гуѕ	Thr		Pne	ьуѕ	Arg	Arg		PIO
396	77.5	77.	mla sa	C	645	7	~1	a 1	7	650	7	7	D	17n 1	655	1707
	HIS	Ala	Thr	_	Pne	ASI	GIY	GIU	Asp	Pne	Asp	Arg	PLO	670	vai	vai
400	C	7	O	660	C	mb	7 ~~~	C1	665	Mr	~1	Crra	7.00		C111	Dho
	ser	ASII	-	ser	Cys	THE	Arg		Asp	TAT	GIU	Cys	685	PIIE	GIY	Pile
404	T	Mak.	675	a 1	7 ~~	т о	0.00	680	a1	1707	C	170 l		7.00	Dwa	C1.,
	ьуѕ		ser	GIU	Asp	ьец	695	Leu	Glu	vaı	Cys	700	PIO	Asp	PIO	GIU
408	Dho	690	c1	Trea	Cor	П		Dro	Dro	1707	Dro		Dro	17a 1	C111	Sor
	705	ser	Gry	пур	261	710	SEI	FIO	Pro	val	715	Cys	FIU	vai	СТУ	720
		Тиг	λνα	Ara	Thr		Gly	Тугт	Arg	Lve		Sar	G1 v	Δen	Thr	
416	1111	TYL	Arg	Arg	725	Arg	Gry	ıyı	Arg	730	116	Ser	СТУ	тэр	735	Cys
	Cor	Cl v	Clv	λcn		Glu	λla	Λrα	Leu		Glv	Glu.	T.e.11	V=1		Cve
420	DCI	Gry	GLY	740	vai	GIU	AIU	nr 9	745	Olu	CLY	OIU	БСи	750	110	Cyb
	Pro	T.e.ii	Δla		Glu	Δsn	Glu	Phe	Ile	T.e.ii	Tyr	Δla	Val		Lvs	Ser
424			755		0_0			760			-1-		765	5	-1-	
	Tle	Tvr		Tvr	Asp	Len	Ala		Gly	Ala	Thr	Glu		Leu	Pro	Leu
428		770	5	-1-			775		2			780				
	Thr	_	Leu	Ara	Ala	Ala		Ala	Leu	Asp	Phe	Asp	Tvr	Glu	His	Asn
	785	2				790				-	795	-	•			800
435	Cys	Leu	Tyr	Trp	Ser	Asp	Leu	Ala	Leu	Asp	Val	Ile	Gln	Arq	Leu	Cys
436	•		•	-	805	_				810				_	815	-
439	Leu	Asn	Gly	Ser	Thr	Gly	Gln	Glu	Val	Ile	Ile	Asn	Ser	Gly	Leu	Glu
440			_	820		_			825					830		
443	Thr	Val	Glu	Ala	Leu	Ala	Phe	Glu	Pro	Leu	Ser	Gln	Leu	Leu	Tyr	Trp
444			835					840					845			
447	Val	Asp	Ala	Gly	Phe	Lys	Lys	Ile	Glu	Val	Ala	Asn	Pro	Asp	Gly	Asp
448		850					855					860				
451	Phe	Arg	Leu	Thr	Ile	Val	Asn	Ser	Ser	Val	Leu	Asp	Arg	Pro	Arg	Ala
452	865					870					875					880
455	Leu	Val	Leu	Val	Pro	Gln	Glu	Gly	Val	Met	Phe	Trp	Thr	Asp	Trp	Gly
456					885					890					895	
459	Asp	Leu	Lys	Pro	Gly	Ile	Tyr	Arg	Ser	Asn	Met	Asp	Gly	Ser	Ala	Ala
460				900					905					910		
463	Tyr	His	Leu	Val	Ser	Glu	Asp	Val	Lys	Trp	Pro	Asn	Gly	Ile	Ser	Val
464			915					920					925			
467	Asp	Asp	Gln	Trp	Ile	Tyr	Trp	Thr	Asp	Ala	Tyr	Leu	Glu	Cys	Ile	Glu
468		930					935					940				

VERIFICATION SUMMARY DATE: 08/07/2006
PATENT APPLICATION: US/10/539,443 TIME: 09:43:37

Input Set : A:\SequenceListing.ST25.txt
Output Set: N:\CRF4\08072006\J539443.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date